

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: GEORGE E. BERKEY, et al.

Examiner: TBA

Serial No:

Group Art Unit: TBA

Filed:

For: LOW WATER PEAK OPTICAL  
WAVEGUIDE FIBERINFORMATION DISCLOSURE STATEMENT  
UNDER 37 C.F.R. §§ 1.56, 1.97 – 1.98Commissioner of Patents  
Alexandria, VA 22313-1450

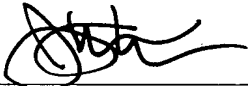
Dear Sir:

The Examiner's attention is hereby directed to the following reference(s) listed on the attached Form PTO-1449 for consideration in connection with the examination of the above-identified patent application. One copy of the reference(s) is enclosed.

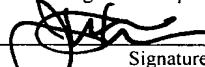
This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the enclosed documents constitute "prior art." If it should be determined that any of the submitted documents do not constitute "prior art" under United States law, applicant(s) reserve the right to present to the office the relevant facts and law regarding the appropriate status of such documents.

Applicant(s) further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the enclosed references, should one or more of the references be applied against the claims of the present application.

Respectfully submitted,

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Corning, NY 14831  
607-974-9061Date: 6 Feb 2004

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner of Patents, Alexandria, Va 22313-1450 on

6 Feb 2004  
Date of DepositJoseph M. Homa  
Name of applicant, assignee, or  
Registered Representative  
Signature6 Feb 2004  
Date of Signature

FORM PTO-1449 (MODIFIED)  LIST OF PATENTS AND PUBLICATIONS FOR APPLICANTS INFORMATION DISCLOSURE STATEMENT	ATTORNEY DOCKET NO.	SERIAL NO.
	SP00-386 A	10/023,291
	APPLICANT Berkey et al.	
	FILING DATE December 14, 2001	GROUP: 2874

REFERENCE DESIGNATION				U.S. PATENT DOCUMENTS			
Examiner Initial		Document Number	Date	Name	Class	Sub-Class	Filing Date if Approp.
	AA	3,933,454	01/20/76	DeLuca	65	3	
	AB	4,345,928	08/24/82	Kawachi et al	65	18.2	
	AC	4,462,970	07/31/84	Pastor et al	423	263	
	AD	4,462,974	07/31/84	Pastor et al	423	335	
	AE	4,465,656	08/14/84	Pastor et al	423	339	
	AF	4,515,612	05/07/85	Burrus, Jr. et al	65	3.12	
	AG	4,526,599	07/02/85	Barns et al	65	3.12	
	AH	4,675,040	06/23/87	Tanaka et al	65	3.12	
	AI	4,684,383	08/04/87	Cavender, Jr. et al	65	3.12	
	AJ	4,822,136	04/18/89	Hicks, Jr.	350	96.34	
	AK	4,842,626	06/27/89	Barns et al	65	2	

FOREIGN PATENT DOCUMENTS								
		Document Number	Date	Country	Class	Sub-Class	Translation Yes      No	
	AL	DD 292 587 A7	08/08/91	Germany	C03B	37/018		X
	AM	DE 3206143 A1	02/20/82	Germany	C03B	37/075		X
	AN	DE 3713029 A1	04/16/87	Germany	C03B	37/012		X
	AO	EP 0164681 B1	06/05/85	Europe	G02B	6/16		
	AP	EP 0321182 A2	12/13/88	Europe	C03B	37/025		
	AQ	EP 0656326 B1	11/23/94	Europe	C03B	37/018		

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)	
AR	Fiber-Optic Communications Systems 2 <sup>nd</sup> Edition, G. P. Agrawal, p. 223 (1997)
AS	Fiber-Optic Communications Systems 2 <sup>nd</sup> Edition, Agrawal, p. 113 (1997)
AT	Belov et al, "OH Absorption in GeO <sub>2</sub> -Doped Fused Silica Fibres", Electronics Letters, Sept. 16, 1982, vol. 18, No. 19, pp. 836-837
AU	Birks et al, "Elimination of Water Peak in Optical Fibre Taper Components", Electronics Letters, Oct. 11, 1990, vol. 26, No. 21, pp. 1761-1762

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Examiner Initial		Document Number	Date	Name	Class	Sub-Class	Filing Date if Approp.
	AV	5,318,611	06/07/94	Merritt	65	3.12	
	AW	5,397,372	03/14/95	Partus et al	65	391	
	AX	5,692,087	11/25/97	Partus et al	385	123	
	AY	6,131,415	10/17/00	Chang et al	65	391	
	AZ	6,205,268	03/20/01	Chraplyvy et al	385	24	
	BA	6,266,980	07/31/01	Lemon et al	65	414	
	BB	US 2002/0028051	03/07/02	Bickham et al	385	123	
	BC	US 2002/0051612	05/02/02	Shimizu et al	385	123	
	BD	09/547,598		Berkey et al			04/11/00

FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Sub-Class	Translation Yes No
	BE	EP 0887670 A2	06/09/98	Europe	G02B	6/16	
	BF	EP 1030473 A3	02/09/00	Europe	H04B	10/18	
	BG	EP 1182176 A1	08/25/00	Europe	C03C	25/00	
	BH	EP 1215179 A2	10/19/01	Europe	C03B	37/014	
	BI	GB 2 149 392 A	11/11/83	United Kingdom	C03C	23/00	
	BJ	1-242432	9/27/89	Japan	C03B	37/018	X

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)		
BK	Chang et al, "New Hydrogen Aging Loss Mechanism in the 1400 nm Window", Optical Fiber Communication Conference, 1999, Bell Laboratories, Lucent Technologies, Norcross, GA, pp. PD22-1-PD22-3	
BL	Chida et al, "Fabrication of OH-Free Multimode Fiber by Vapor Phase Axial Deposition", IEEE Journal of Quantum Electronics, Nov. 1982, vol. QE-18, No. 11, pp. 1883-1889	
BM	Chida et al, "VAD Graded-Index Optical Fiber Fabrication", Review of the Electrical Communication Laboratories, (1984), vol. 32, No. 3, pp. 404-410	

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	BN	09/558,770		Allen et al			04/26/00
	BO	09/722,804		Bookbinder et al			11/27/00
	BP	09/822,168		Berkey et al			03/31/01
	BQ	09/996,632		Berkey et al			11/28/01
	BR	10/023,291		Berkey et al			12/14/01
	BS	60/309,160		Berkey et al			07/31/02

FOREIGN PATENT DOCUMENTS								
		Document Number	Date	Country	Class	Sub-Class	Translation Yes No	
	BT	10-68834	03/10/98	Japan	G02B	6/16		X
	BU	55-23081	02/19/80	Japan	C03B	37/00		X
	BV	57-17433	01/29/82	Japan	C03B	37/00		X
	BW	57-34034	02/24/82	Japan	C03B	37/00		X
	BX	60-71536	04/23/85	Japan	C03B	37/018		X
	BY	60-86043	05/15/85	Japan	C03B	37/018		X
	BZ	63-225546	09/20/88	Japan	C03B	37/018	X	
	CA	WO00/64824	11/02/00	PCT	C03B	37/00		
	CB	WO00/64825	11/02/00	PCT	C03B	37/014		

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)		
	CC	Dianov et al, "Low-Hydrogen Silicon Oxynitride Optical Fibers Prepared by SPCVD", Journal of Lightwave Technology, July 1995, vol. 13, No. 7, pp. 1471-1474
	CD	Diaz de la Iglesia et al, "Loss Spread in Single-Mode Fibers Due to OH-Ion Concentration and Transmitter-Wavelength Eluctuations", International Wire & Cable Symposium Proceedings 1987, pp. 629-639
	CE	Hanawa et al, "Fabrication of Completely OH-Free V.A.D. Fibre", Electronics Letters, August 28, 1980, vol. 16, No. 18, pp. 699-700

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	CF						

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	CG						

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)		
	CH	Iino et al, "Mechanisms of Hydrogen-Induced Losses in Silica-Based Optical Fibers", Journal of Lightwave Technology, Nov. 1990, vol. 8, No. 11, pp. 1675-1679
	CI	Jablonowski, "Fiber Manufacture at AT&T with the MCVD Process", Journal of Lightwave Technology, Aug. 1986, vol. LT-4, No. 8, pp. 1016-1019
	CJ	Keck et al, "On the ultimate lower limit of attenuation in glass optical waveguides", Applied Phys. Letters, April 1973, vol. 22, No. 7, pp. 307-309
	CK	Kosaka et al, "Fabrication of ultra low-loss and low-OH VAD single mode fibers", Optical Communication, ECOC '84, 10 <sup>th</sup> European Conference on Optical Communication, Sept. 3-6, 1984, Stuttgart, FRG
	CL	Kosaka et al, "(1144) A Low Loss, Low OH Content, Single-Mode Fiber", The 1984 National Convention of the Electronic Telecommunications Society (Japanese with English language translation)
	CM	Moriyama et al, "Ultimately Low OH Content V.A.D. Optical Fibres", Electronic Letters, Aug 28, 1980, Vol. 16, No. 18, pp. 698-699
	CN	Murata, "Recent Developments in Vapor Phase Axial Deposition", Journal of Lightwave Technology, Aug. 1986, vol. LT-4, No. 8, pp. 1026-1033
	CO	Bachmann et al, "Low OH Excess Loss PCVD Fibres Prepared by Fluorine Doping", Electronics Letters, Jan 5, 1984, vol. 20, No. 1, pp. 35-37
	CP	MicroPatent Report of Abstract of JP63008707, June 30, 1986, Fujikura Ltd

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	CQ						
	CR						

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		Document Number	Date	Country	Class	Sub-Class	Translation Yes No
	CS						
	CT						
	CU						

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)	
CV	Nakahara et al, "Loss Increase in Deuterium-Doped VAD Fibres with Heat Treatment", Electronics Letters, April 12, 1984, Vol. 20, No. 8, pp. 327-329
CW	Osanai et al, "Effect of Dopants on Transmission Loss of Low-OH-Content Optical Fibres", Electronics Letters, Oct. 14, 1976, Vol. 12, No. 21, pp. 549-550
CX	Peder-Gothoni et al, "Reduction of Hydroxyl Ion Diffusion in Optical Fibers", Optics Communications, June 1, 1985, vol. 54, No. 3, pp. 137-140
CY	Stone et al, "Overtone vibrations of OH groups in fused silica optical fibers", J. Chem. Phys. 76(4), Feb. 15, 1982, , pp. 1712-1722
CZ	Stone, "Interactions of Hydrogen and Deuterium with Silica Optical Fibers: A Review", Journal of Lightwave Technology, May 1987, vol. LT-5, No. 5, pp. 712-733
DA	Stone et al, "Reduction of the 1.38-μm Water Peak in Optical Fibers by Deuterium-Hydrogen Exchange", AT&T, The Bell System Technical Journal, Oct. 1980, vol. 59, No. 8
DB	Tsujikawa et al, "Reduction of OH absorption loss by deuteration in Na <sub>2</sub> O-Al <sub>2</sub> O <sub>3</sub> SiO <sub>2</sub> glass fibre", Electronics Letters, Oct. 15, 1998, vol. 34, No. 21

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	DC						
	DD						

FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Sub-Class	Translation Yes No
	DE						
	DF						
	DG						

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)	
DH	MicroPatent Report of Abstract of JP01242432, March 23, 1988, Furukawa Electric Co. Ltd (Corresponds to item BJ herein)
DI	MicroPatent Report of Abstract of JP10068834, August 28, 1996, Sumitomo Electric (Corresponds to item BT herein)
DJ	MicroPatent Report of Abstract of JP55023081, August 8, 1978, Sumitomo Electric (Corresponds to item BU herein)
DK	MicroPatent Report of Abstract of JP57017433, May 24, 1980, Nippon Telegraph & Telephone Corp (Corresponds to item BV herein)
DL	MicroPatent Report of Abstract of JP57034034, August 5, 1980, Nippon Telegraph & Telephone Corp. (Corresponds to item BW herein)
DM	MicroPatent Report of Abstract of JP60071536, August 10, 1984, Nippon Telegraph & Telephone Corp. (Corresponds to item BX herein)
DN	MicroPatent Report of Abstract of JP60086043, October 14, 1983, Nippon Telegraph & Telephone Corp. (Corresponds to item BY herein)

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	DO	4,515,612	05-1985	Burrus et al.	65	426	
	DP	5,917,109	06-1999	Berkey, George E.	65	412	
	DQ	4,685,945	08-1987	Freund, Friedemann	65	426	
	DR						
	DS						

FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Sub-Class	Translation Yes No
	DT	EP 0 785 448	07/23/97	Europe	G02B	6/16	
	DU						

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)		
	DV	Kumar et al, "Effects of Deuterium Treatments on the Optical Properties of Fused Silica", <i>Laser Induced Damage in Optical Materials: 1981</i> , pp. 268-272
	DW	Dialog Report of Abstract of DD 292587, August 8, 1991, Physikalisch-Techn (PHYS-N) (Corresponds to item AL herein)
	DX	Dialog Report of Abstract of DE 3206143, February 20, 1982, Licentia Patent-View GmbH (LICN) (Corresponds to item AM herein)
	DY	Dialog Report of Abstract of DE 3713029, April 16, 1987, Deut Bundespost (DEBP) (Corresponds to item AN herein)
	DZ	

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